

2815 75W

Based on PTO/SB/21 (05-03)
Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

			_	
(Application Number		09/739,582
TRANSMITTA	\L	Filing Date		12/15/2000
FORM	First Named Inventor		Steven Teig	
(to be used for all correspondence afte	er initial filing)	Group Art Unit		Chris Chu
		Examiner Name		2815
Total Number of Pages in This Submiss	ion *	Attorney Docket Number		SPLX.P0005
	Enclosure	es (Check all that appl	y)	
Fee Transmittal Form	Assignme (for an ap	ent Papers		After Allowance Communication to Group
Fee Attached	Drawing(s	·		Appeal Communication to Board of Appeals and Interferences
Amendment/Reply	Licensing	-related Papers		Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
After Final	Petition			Proprietary Information
Affidavlts/declarations(s)	Petition to	Convert to a Provisional		Status Letter
Preliminary Amendment		:		
Extension of Time Request		Attorney, Revocation f Correspondence Address	×	Other Enclosures (Listed below):
Express Abandonment Request	Terminal Disclaimer			Postcard 11 References Copy of eİDS with a Fee
Request to Rescind Previous Non-Publication Request	Request f	or Refund		Transmittal
Information Disclosure Statement and PTO-1449	CD, Numl	ber of CD(s)		
Certified Copy of Priority Documents	Remarks:			
Response to Missing Parts/ Incomplete Application				
Response to Missing Parts under 37 CFR 1.52 or 1.53	110			
	ATURE OF AP	LICANT, ATTORNEY,	OR AC	GENT
Firm <i>Or</i> Individual name Mani <i>A</i>	deli Reg. No	39,585 of Stattler Joh	ansei	n & Adeli LLP
Signature	MW			
Date July 22	, 200			
CERT	IFICATE O	F TRANSMISSION	/MA	ILING
I hereby certify that this corresponder Postal Service with sufficient postage Alexandria, VA 22313-1450, on this dat	as firs class ma	mile transmitted to the USP1 til in an envelope addressed	O or o	deposited with the United States mmissioner for Patents, P.O. Box 1450,
Typed or printed name Mani Ad		1		
Signature	MW	\	Da	te July 22, 2004



CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22318-1450, or July 22, 2004.

Mani Adeli

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner: Chris Chu

Group Art Unit: 2815

In the application of:

Steven Teig

Serial No.: 09/739,582

Filing Date: 12/15/2000

For: INTEGRATED CIRCUIT WIRING

ARCHITECTURES TO SUPPORT

INDEPENDENT DESIGNS

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, applicants submit with this Information Disclosure Statement the attached Form PTO-1449, and copies of the documents listed in the 1449 form for consideration by the Examiner. The Examiner is requested to make these documents of record. Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

This Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to

the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

This Information Disclosure Statement is submitted after receipt of a first Office Action on the merits but before the Final Office Action. Accordingly, a fee is required. However, Applicants note that on this day, July 22, 2004, Applicants have submitted another Information Disclosure Statement in electronic form and paid the requisite fee along with this electronic submission. See attached hard copy of electronic IDS and its fee transmittal. Therefore, Applicants submit that no separate fee is required for this Information Disclosure Statement.

However, in the unlikely event that the Patent Office determines that additional fees, extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-1128** referencing SPLX.P0005. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: July 22, 2004

Respectfully submitted,

Mahilalar

Registration No. 39,585

Stattler, Johansen & Adeli LLP P.O. Box 51860 Palo Alto, CA 94303-0728

Phone No. (650) 752-0990 x102 Fax No. (650) 752-0995

Please type a rous sign (+) inside this box TM +

Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

			то	Application Number	09/739,582
PADEMAN				Filing Date	12/15/2000
	DRMATION DI TEMENT BY A			First Named Inventor	Steven Teig
SIA	I EINIEINI DI A	MPFL	ICAN I	Group Art Unit	2815
(1	use as many sheets a	s nece	ssary)	Examiner Name	Chris Chu
Sheet	1	of	2	Attorney Docket Number	SPLX.P0005

	FOREIGN PATENT DOCUMENTS									
Examiner* Initials	Cite No.1	For Office ³		ent d Code (nown) ⁵	Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τ'		
	1.	JP	2000-082743		03-21-2000	lgarashi et al.	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	\		

	NON PATENT LITERATURE DOCUMENTS							
Examiner*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶					
	2.	Chen et al., Optimal Algorithms for Bubble Sort Based Non-Manhattan Channel Routing, May 1994, Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions Volume: 13 Issues, pp. 603-609.						
	3.	Chen, H. et al., Physical Planning of On-Chip Interconnect Architectures, 2002, IEEE, International Conference, pp. 30-35						
	4.	Cong J. et al., DUNE – A Multilayer Gridless Routing System, May 2001, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, vol 20, iss. 5, pp. 633-647.						
	5.	Dion J. et al., Contour: A Tile-based Gridless Router, March 1995, Digital Western Research Laboratory, research Report 95/3, pp.1-22						
	6.	Merriam-Webster's Collegiate Dictionary, 10 th edition, Merriam-Webster Incorporated, p.606						
	7.	Morton, P. B. et al., An Efficient Sequential Quadratic Programming Formulation of Optimal Wire Spacing for Cross-Talk Noise Avoidance Routing, UCSC-CRL-99-05, March 10, 1999.						
	8.	NN71091316, Use of Relatively Diagonal And Rectangular Wiring Planes n Multilayer Packages, September 1971, IBM Technical Disclosure Bulletin, Vol. No. 14, Issue No. 4, pp. 1316-1317.						

Examiner	Date	
Signature	Considered	 _

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number(optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁴ Applicant is to place a check mark here if English language Translation is attached.

Based on PTO/SB/08 a & b (05-03)

plus sign (+) inside this box →

Approved for use through 05/31/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

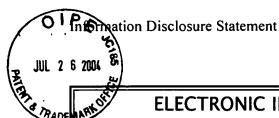
	31					
JUL 2 6 2004	Supstitute for form	1449A/P	то	Application Number	09/739,582	<u>-</u> .
		001	201105	Filing Date	12/15/2000	
INFORMATION DISCLOSURE				First Named Inventor	Steven Teig	
MADEMA		~! ! -		Group Art Unit	2815	
(us	se as many sheets a	as neces	ssary)	Examiner Name	Chris Chu	
Sheet	2	of	2	Attorney Docket Number	SPLX.P0005	

NON PATENT LITERATURE DOCUMENTS								
Examiner* Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶					
	9.	Royle, J. et al., Geometric Compaction in One Dimension for Channel Routing, 24 th ACM/IEEE Design Automation Conference, 1987, pp 140-145.						
	10.	Schiele, W. et al., A Gridless Router for Industrial Design Rule, 27 th ACM-IEEE Design Automation Conference, pp. 626-631, 1990.						
	11.	Tseng H. et al., A Gridless Multilayer Router for Standard Cell Circuits Using CTM Cells, Oct. 1999, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, vol 18, iss. 10, pp. 1462-1479.						

Examiner	Date	
Signature	Considered	

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number(optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete. including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18 Stylesheet Version v18.0

> Title of Invention

Integrated circuit wiring architectures to support independent designs

Application Number:

09/739582

09/739582

Confirmation Number:

3530

First Named Applicant:

Steven Teig

Attorney Docket Number: SPLX.P0005

Art Unit:

2815

Examiner:

Chris C. Chu

Search string:

(5637920 or 5640327 or 5646830 or 5650653 or 5689433 or 5784289 or 5801385 or 5822214 or 5880969 or 5889329 or 6111756 or 6150193 or 6260183 or 6301686 or 6307256 or 6316838 or 6324674 or 6412097 or 6516455 or 6645842 or

20010009031 or 20020069397 or

20030025205).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	5637920	1997-06-10	Loo			
	2	5640327	1997-06-17	Ting			
	3	5646830	1997-07-08	Nagano			
	4	5650653	1997-07-22	Rostoker et al.			
	5	5689433	1997-11-18	Edwards			
	6	5784289	1998-07-21	Wang			
	7	5801385	1998-09-01	Endo et al.	,		
	8	5822214	1998-10-13	Rostoker et al.			
	9	5880969	1999-03-09	Hama et al.			
]		

10	5889329	1999-03-30	Rostoker et al.	
11	6111756	2000-08-29	Moresco	
12	6150193	2000-11-21	Glenn	
13	6260183	2001-07-10	Raspopovic et al.	В1
14	6301686	2001-10-09	Kikuchi et al.	B1
15	6307256	2001-10-23	Chiang et al.	B1
16	6316838	2001-11-13	Ozawa et al.	B1
17	6324674	2001-11-27	Andreev et al.	B2
18	`6412097	2002-06-25	Kikuchi et al.	B1
19	6516455	2003-02-04	Teig et al.	B1
20	6645842	2003-11-11	lgarashi et al.	B2

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
	1	20010009031	2001-07-19	Nitta et al.	Al		
	2	20020069397	2002-06-06	Teig et al.	A1		
	3	20030025205	2003-02-06	Shively	Al		

Signature

Examiner Name	Date



FEE TRANSMITTAL

Electronic Version v08 Stylesheet Version v08.0

> Title of Invention

Integrated circuit wiring architectures to support independent designs

Application Number:

09/739582 *09/739582*

Date:

2000-12-15

First Named Applicant:

Steven Teig

Attorney Docket Number: SPLX.P0005

Art Unit:

2815

Examiner:

Chris C. Chu

TOTAL FEE AUTHORIZED \$180

Patent fees are subject to annual revisions on or about October 1st of each year.

BASIC FILING FEE

Fee Description	Fee Code	Amount \$	Fee Paid \$
Submission Of Information Disclosure Stmt Fee	1806	180	180

AUTHORIZED BILLING INFORMATION

The commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Credit account number:

7556

Expiration Date (YYYYMMDD): 2004-08-31

Authorized name:

Mani Adeli

Billing address:

94303